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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,396	07/18/2003	Kee Park	5646-58IPCT	4689

20792 7590 04/07/2004

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EXAMINER


LAM, DAVID

ART UNIT	PAPER NUMBER
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2818

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/622,396	Applicant(s) PARK ET AL.	
	Examiner David Lam	Art Unit 2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-29, 48-50, 59-63 and 65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 59-62 is/are allowed.
- 6) ☒ Claim(s) 22-29, 48-50 and 65 is/are rejected.
- 7) ☒ Claim(s) 62 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/18/03</u> . | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____. |
|---|---|

DETAILED ACTION

Response to Election/Restriction

1. Applicant's election without traverse of Group I claims 22-29, 48-50, 59-63 and 65 are acknowledged.

- Claims 1-21, 30-47, 51-58 and 64 have been cancelled.
- Claims 22-29, 48-50, 59-63 and 65 are pending in the application.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The disclosure is objected to because of the following informalities: On page 40, line 8, "P25, P26" should be change to -- P27, P29 --. Appropriate correction is required.

Claim Objections

4. Claim 63 objected to because of the following informalities: claim 63 depends on a cancelled claim 58. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 22-29, 65 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 22-29, 65, the claims contain numerous unclear statements.

Applicant's attention is required to further review the claims and correct necessary correction of punctuation in order to provide a more clearly understanding of the intended claimed invention.

Regarding claims 22-29, the phrase "writing a xR segment first search word" is unclear. It is unclear what applicant means by writing/reading a xR segment of first row in the CAM array? What being reading/writing from the segment?

With regard to claim 65, the phrase "writing of a xR segment first search word" is unclear. It is unclear what applicant means by search a xS segment? What being search from the segment?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 22-24, 65, insofar as in compliance with 35 USC § 112, rejected under 35 U.S.C. 102(e) as being anticipated by Pereira et al. (6,697,276).

Regarding to claim 65, Pereira et al. disclose a content address memory (CAM) comprising: at least on CAM array block (470) including plurality of segments (SEG1-SEG4); wherein the CAM array block configured to writing a first word of the segment into a first row of CAM array block while concurrently performed search for the first word of the others segment of the same CAM array block. *See Figs. 3-6, 31, 41, 43; Cols 5-7, 25-27, 33-38.*

As of claims 25-27, Pereira et al. further disclose the CAM array block also configure to performing reading words from one segment of the CAM array while concurrently searching for words from other segment. *See Figs. 6-7; Cols.6-10.*

With regard to claims 22-24, they encompass the same scope of invention as to that of claim 65 except they draft in method format instead of apparatus format. The claims are therefore rejected for the same reason as set forth above.

Allowable Subject Matter

7. Claim Claims 28-29 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach the combination of the steps of writing, searching and reading word from the CAM array as disclose in independent claim 28.

8. The following is an examiner's statement of reasons for allowance: Claims 59-62 are allowable over the prior art of record because none of the prior art whether taken singularly or in combination, especially when these limitations are considered within the specific combination claimed, to teach: a content address memory (CAM) device comprising: a segment to segment match line control, among others as claimed in independent claim 59, having a first plurality of latches are configured to stored match line information derived from xR segment of the CAM array during a xR search operation.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Allan et al. (6,538,911) disclose a CAM with block select for power management.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lam whose telephone number is 571-272-1782. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

D. Lam

March 30, 2004


DAVID LAM
PRIMARY EXAMINER